

In re Patent Application of:  
**BELCHER ET AL.**  
Serial No. 10/033,529  
Filing Date: December 28, 2001

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REMARKS

Claims 1-35 remain in this application. No claims have been cancelled. Claim 27 has been amended.

Applicants thank the Examiner for the detailed study of the application and prior art. Applicants note the allowance of claims 1-26 and 34 and 35. Applicants note the rejection of claims 27-33 as obvious over U.S. Patent No. 5,995,046 to Belcher et al. (hereinafter "Belcher") in view of U.S. Patent No. 6,438,389 to Sandhu et al. (hereinafter "Sandhu").

At the outset, Applicants have amended claim 27 to place the rejected claims 27-33 in condition for allowance. Claim 27 now recites not only the plurality of access point stations that receive and transmit communication signals within the wireless local area network, but also the processor operatively connected to each of the access point stations and operative for processing the communication signals received from a mobile station and determining which are first-to-arrive signals and conducting differentiation of the first-to-arrive signals for locating the mobile station. This processor also weights delayed versions of at least one interference signal by controlling amplitude and phase with weighted functions  $W_1, W_2 \dots W_n$ , and summing any resultant

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weighted replicas to determine an approximation of the dispersed interference for cancelling interference.

Applicants note that Belcher is directed to an asset management radio location system for locating tags with correlation-based RF processing and spatially diverse antennas.

Sandhu is specifically directed to a wireless communication system with an adaptive beam selection using different antennas that form  $N$  distinct beams that are measured for signal quality. Although Applicants agree that Sandhu discloses that  $N$  beams can be measured and frequency down converted, Sandhu does not disclose the summing of resultant weighted replicas to determine an approximation of the dispersed interference or canceling interference. In addition, nowhere does the combination of Belcher and Sandhu suggest the wireless local area network system with the plurality of access point stations processor that also determines first-to-arrive signals and conducts differentiation of first-to-arrive signals for locating a mobile station. The processor can weight delayed versions, control amplitude and phase weighted functions  $W_1, W_2 \dots W_n$ , and sum the resultant weighted replicas to determine an

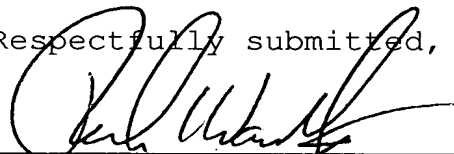
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approximation of the dispersed interference for cancelling interference.

Applicants contend that the present case is in condition for allowance and respectfully requests that the Examiner issue a Notice of Allowance and Issue Fee Due. If the Examiner has any questions or suggestions for placing this case in condition for allowance, the undersigned attorney would appreciate a telephone call.

Respectfully submitted,



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**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: **MAIL STOP AMENDMENT, COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450**, on this 8<sup>th</sup> day of July, 2004.

